



DESIGN 5

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SYDNEY OPERA HOUSE

JOAN SUTHERLAND THEATRE SAVE & FRONT-OF-HOUSE PROJECTS

Heritage Impact Statement

1.0 BACKGROUND & PURPOSE OF REPORT

Design 5 - Architects has been engaged by the Sydney Opera House Trust (SOHT) to prepare an assessment of the Heritage Impact of a proposed suite of projects affecting Front-of-House and Back-of-House areas associated with the Joan Sutherland Theatre (JST), referred to in this application as the **Joan Sutherland Theatre SAVE and Front-of-House Projects**. A more detail description is given below in Section 3 of this report.

The report has been prepared by Alan Croker (director) of Design 5.

2.0 SEARS REQUIREMENT

The requirements for this Heritage Impact Statement (HIS) are stated in Schedule 2 of the Secretary's Environmental Assessment Requirements (SEARS) for Application No. SSD 7665, as modified and issued 23 August 2016. They are as follows:

The application must include a Heritage Impact Statement (HIS) prepared by a qualified Heritage Consultant.

The HIS must address any impact to the heritage significance of the Sydney Opera House and its setting, including impacts to the world heritage buffer zone and/or Aboriginal, historic or archaeological significance.

- *The HIS must provide a detailed assessment of each of the key proposed elements, and implications of BCA compliance and construction issues.*
- *The HIS must consider current and known future access requirements under the Building Code of Australia and the Disability Discrimination Act 1992 and assess the heritage impact of these requirements.*
- *The HIS must assess the proposal against the requirements of the following documents:*
 - *NSW Heritage Manual;*
 - *Matters of National Environmental Significance Significant Impact Guidelines 1. 1;*

- *Management Plan for the Sydney Opera House;*
- *Conservation Management Plan Sydney Opera House: A Revised Plan for the Conservation of the Sydney Opera House and its Site (3rd Edition);*
- *Utzon Design Principles; and*
- *Relevant Council EPLs.*

3.0 BASIS OF ASSESSMENT

This Heritage Impact Statement (HIS) assesses the proposal against the following documents:

- *Matters of National Environmental Significance – Significant Impact Guidelines 1.1*, EPBC Act 1999, Department of the Environment 2013
- *Sydney Opera House, A Revised Plan for the Conservation of the Sydney Opera House and its Site*, by James Semple Kerr. Third Edition, SOHT, 2003 (referred to below as the CMP 3rd edition)
- *Sydney Opera House, Utzon Design Principles*, SOHT May 2002 (referred to below as the UDP 2002)

The *Management Plan for the Sydney Opera House* (prepared in 2005 as part of the bilateral agreement negotiations) references the CMP and the Utzon Design Principles and provides a framework for protection of the World and National Heritage values of the Sydney Opera House site. It has been endorsed by the Heritage Division, Department of Planning (formerly the NSW Heritage Office). The Management Plan states that approval of actions in relation to the Sydney Opera House site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals.

Assessment of these projects against the *Sydney Opera House Accessibility Master Plan* is addressed in the EIS accompanying this application.

3.1 Methodology

This Heritage Impact Statement has been prepared in accordance with the principles and processes of the *Australia ICOMOS Burra Charter 2013*. The preparation of this Heritage Impact Statement also follows the process and model recommended in the NSW Heritage Manual, specifically the NSW Heritage Office guideline *Statements of Heritage Impact* (revised 2002), including consideration of alternative options and their impact.

3.2 Naming of spaces

The naming of some of the projects proposed in this application differs from the conventional naming for their affected spaces, or the names used in the Utzon Design Principles (UDP) and the Conservation Management Plan (CMP 3rd edition). These project names are working titles only and do not imply a re-naming of these spaces. The correlation of these titles / names are as follows:

project / working title / name	conventional name
Under the steps	Vehicle Concourse
Entry Foyer	Box Office Foyer
Joan Sutherland Theatre	Opera Theatre (UDP & CMP 3rd edition)

3.3 Documents reviewed

Joan Sutherland Theatre – Accessibility Projects

The following documents prepared by Scott Carver:

Drawings - 160805 DA Issue_Accessibility R3 (cover sheet dated August 2016)

Joan Sutherland Theatre – Follow Spot Room

The following documents prepared by Scott Carver:

Drawings - 160801 DA Issue_Follow Spot Room (Rev A, cover sheet dated 02/08/2016)

Joan Sutherland Theatre – Fire Curtain

The following documents prepared by Scott Carver:

Drawings - 49-OT-SC019-931B

Eastern Accommodation

The following documents prepared by TZG:

Drawings - 160805 DA Issue_Eastern Offices, (Rev A, cover sheet dated 02/08/2016)

Entry (Box Office) Foyer

The following documents prepared by TZG:

Drawings - 160805 DA Issue_Entry Foyer, (Rev A, cover sheet dated 02/08/2016)

4.0 BRIEF DESCRIPTION OF PROPOSAL

The proposed projects are briefly described as follows:

Joan Sutherland Theatre (JST) – Accessibility Projects

The purpose of this set of projects is to improve accessibility, vertically and horizontally both within the JST foyer spaces and in the theatre itself, provision of accessible facilities for performers, and improved accessibility for performers to the orchestra pit.

These projects were identified in the Accessibility Masterplan 2015 prepared by Scott Carver and comprise:

- **JST DA Project 1 – Seating Upgrade** – provision of wheelchair accessible seating in two key locations within the theatre where access is possible and sight lines are maintained.
- **JST DA Project 2 – Northern Foyer Access Level 2** – provision of an equitable path of travel to the western side of the theatre, connecting the South Side Foyer to the Northern Foyer and accessible seating at Level 2.
- **JST DA Project 3 – Northern Foyer Access Level 3** – provision of an equitable path of travel to the western side of the theatre, connecting the Northern Foyer to accessible seating at Level 3.
- **JST DA Project 4 – Northern Foyer Lift 31** – provision of level access to all levels of the Northern Foyer via a new lift on the western side.
- **JST DA Project 5 – Sanitary Facilities Upgrade** – provision of accessible toilet facilities associated with the Northern Foyer for patrons.
- **JST DA Project 6 – Dressing Room Upgrade** – provision of accessible facilities and dressing room upgrades for performers.
- **JST DA Project 7 – Orchestra Pit Accessibility Upgrade** – provision of upgraded access to the Orchestra Pit.

Joan Sutherland Theatre (JST) – Follow Spot Room

A new Follow Spot Room is proposed at the rear of the auditorium to provide deeper penetration of the follow spots for the rear of the JST stage.

Joan Sutherland Theatre – Fire Curtain

Replacement of the existing JST Fire Curtain and associated machinery is proposed.

Eastern Accommodation

This project adapts a narrow suite of spaces on the eastern side of the Podium, vacated with the proposed upgrade of the JST theatre machinery, for back-of-house office accommodation. The work includes construction of a new mezzanine, modifications to allow access to the existing lift, and new hooded openings on the eastern face of the Podium.

Entry Foyer (existing Box Office Foyer)

This project proposes a reorganisation of the present Box Office Foyer with substantial alterations to accommodate the following:

- access to existing lift to the Concert Hall Southern Foyer,
- access to and new Lift 36 to the JST Southern Foyer,
- new cloakings and ticketing areas and systems,
- a new lounge area and bar, in the present location of the box office and adjacent offices,
- smaller lounge area on the south side of the space,
- relocated and smaller shop,
- accessible toilets, and
- new pair of escalators in the location of the existing Utzon Room stairs from the Vehicle Concourse.

5.0 THE ISSUES & CONSIDERATION OF ALTERNATIVES

As legislation in regard to accessibility becomes stronger, it is essential that high profile performance venues such as Sydney Opera House demonstrate leadership in addressing accessibility and inclusivity. If such leadership is not taken, the Opera House risks losing its status as a world renowned performing arts centre and become less attractive to performers, patrons and visitors.

There are significant challenges in meeting this objective and in 2013, on the 40th anniversary of the opening of the Opera House, it was announced that there would be period of renewal where the place and its venues would be upgraded and enhanced to better address current standards and expectations within the framework of the Conservation Management Plan and Utzon Design Principles. The Opera House would once again become a leader at the cutting edge of innovation – a centre pursuing and presenting excellence in the performing arts.

Much of the theatre machinery, while state of the art in 1973, was now outdated by significant advances in digital technology and functional efficiency, and required major overhaul or replacement if the Opera House was to maintain its leading performing arts status. A project addressing this particular issue is the subject of a separate DA and has been assessed for its heritage impacts as part of that DA submission.

A number of renewal projects were identified and a major review of accessibility was commenced. This culminated in the SOH Accessibility Master Plan 2015.

All of the accessibility projects have been developed from a suite of preferred options in this master plan. In its development, a range of potential solutions were explored, the preferred option selected on the basis of its minimised impact and optimal functionality. Many of these potential solutions were again examined and tested as part of the concept design process for the present projects.

Utzon's original design addressed accessibility issues by keeping the central passage at broadwalk level as a public space. This allowed front-of-house public access to the suite of lifts to various foyer levels, and then via a level passage or tunnel at Level 3 in each side foyer to link southern and northern foyer areas. There was no passage at Level 2. When the Opera House opened in 1973, the central passage was the principal loading and servicing area and not available to the public, and because of the widened auditoria resulting from the revised program, the side passages were blocked over. This present suite of projects reinstates a side passage on Level 3 to the JST western side foyer, and introduces another at Level 2. These then allow accessible seating to be provided in a limited range of seating positions within the JST, rather than only at the front of the stalls.

With all of the projects included in this DA, there was a rigorous process of review amongst user groups, consultants, the Opera House's heritage architect, Eminent Architects Panel and Conservation Council at both schematic and concept design stages.

6.0 HERITAGE LISTINGS & STATUTORY FRAMEWORK

6.01 Listings

The Sydney Opera House is listed on the following statutory registers:

- World Heritage List (UNESCO) 2007
- National Heritage List (Australian Government) 2005
- State Heritage Register (NSW Government) 2003
- Sydney Local Environmental Plan 2005 (City of Sydney Council)

The Sydney Opera House is listed on the following non-statutory heritage registers:

- National Register of Significant 20th Century Buildings (Australian Institute of Architects)
- National Trust of Australia (NSW) register
- Register of the National Estate (archived list with the Australian Heritage Council)

6.02 Statutory framework

The statutory framework for approvals for the Opera House is presently as follows:

Commonwealth: *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

- Part 3, Division 1, identifies Commonwealth requirements relating to World Heritage properties and National Heritage places.
- Approval must be obtained from the Commonwealth Minister for the Environment for actions that are likely to have a significant impact on matters of national environmental significance (including National and World Heritage sites) under the EPBC Act.
- The Sydney Opera House site was subject to a bilateral agreement between the Australian Government and the State of New South Wales made in 2005 pursuant to Section 45 of the EPBC Act however this expired in 2010. Under the terms of that agreement (Clause 8.1), an action taken at the Sydney Opera House site would not

require the approval of the Commonwealth Minister for the Environment, Heritage and the Arts where:

the taking of the action has been approved by the State of New South Wales or an agency of New South Wales in accordance with the Management Plan for the Sydney Opera House ...

State (Planning): *Environmental Planning and Assessment Act 1979 (EP&A Act)* and *State Environmental Planning Policy (State and Regional Development) 2011*

- All development on land identified as being within the Sydney Opera House site is designated as State significant development (SSD) (Schedule 2) that requires consent under the EP&A Act.
- The Minister for Planning is the consent authority for SSD.

State (Planning): *Environmental Planning and Assessment Regulation 2000 (Regulation)*

- Clause 288 of the Regulation requires the consent authority to take into consideration the *Management Plan for the Sydney Opera House* (which was prepared in 2005 as part of the bilateral agreement negotiations) in relation to development on the Sydney Opera House site. The Management Plan references the CMP and the Utzon Design Principles.
- The Management Plan provides a framework for protection of the World and National Heritage values of the Sydney Opera House site and has been endorsed by the Heritage Division, Department of Planning (formerly the NSW Heritage Office).
- The Management Plan states that approval of actions in relation to the Sydney Opera House site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals.

State (Planning): *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (REP)*

- The Opera House site falls within the Sydney Harbour Catchment area designated in the REP. It also is within the Foreshores and Waterways area and is designated as a Strategic Foreshore Site.
- The REP sets out a number of considerations that must be taken into account when submitting a DA (see clauses 13-15; Division 2 of Part 3 and Part 5 of the REP).

State (Heritage): *Heritage Act 1977*

- An approval from the Heritage Council under section 60 of the Heritage Act is required for development on the Sydney Opera House site. Where the development has been approved as SSD, the approval under section 60 of the Heritage Act cannot be refused by the Heritage Council.

7.0 DISCUSSION OF IMPACT ON WORLD HERITAGE VALUES OF THE SYDNEY OPERA HOUSE

In 2007, the Sydney Opera House was inscribed on UNESCO's World Heritage List (WHL) for its Outstanding Universal Value (OUV) and as a "masterpiece of human creative genius" under criterion (i) of the Operational guidelines for the implementation of the World Heritage Convention.

The Sydney Opera House was inscribed on the WHL for the following values:

Outstanding Universal Values

The Sydney Opera House constitutes a masterpiece of 20th century architecture. Its significance is based on its unparalleled design and construction; its exceptional engineering achievements and technological innovation and its position as a world-famous icon of architecture. It is a daring and visionary experiment that has had an enduring influence on the emergent architecture of the late 20th century. Utzon's original design concept and his unique

approach to building gave impetus to a collective creativity of architects, engineers and builders. Ove Arup's engineering achievements helped make Utzon's vision a reality. The design represents an extraordinary interpretation and response to the setting in Sydney Harbour. The Sydney Opera House is also of outstanding universal value for its achievements in structural engineering and building technology. The building is a great artistic monument and an icon, accessible to society at large.

Criterion (i)

The Sydney Opera House is a great architectural work of the 20th century. It represents multiple strands of creativity, both in architectural form and structural design, a great urban sculpture carefully set in a remarkable waterscape and a world famous iconic building.

Comment

Many components of these projects will greatly improve access to the JST side of the Opera House to a wider section of society – particularly those with reduced mobility, many of whom will never have experienced some of these spaces before.

The proposed tunnel and lift connections between the various foyer and auditorium levels will have a substantial impact on affected spaces and their fabric, however the functional benefits will be substantial and the impacts will not adversely affect the OUV that underpin its World Heritage Listing.

It will be very important that the details throughout all these projects are resolved to a consistent language and very high quality and comply with the Utzon Design Principles and the CMP. This is being reviewed during the detail design development stage by means of regular 'design consistency' workshops, attended by the SOH heritage architect and members of the Eminent Architects Panel.

Combined with the Theatre Machinery Project (subject of a separate application) these projects will enhance the patron experience and performance and operational capability of the Sydney Opera House to continue to host and celebrate world standard performance art. In this respect this proposal will help sustain the iconic international standing of this Opera House – a key part of its OUV.

In conclusion, it is considered that with fine and detailed resolution during the design development stage, and then excellence in execution, all in accordance with the Utzon Design Principles and the CMP, the proposed works in this application will have significant but ultimately positive impacts and thus not threaten or diminish the Outstanding Universal Values that enshrine it on the World Heritage List.

8.0 DISCUSSION OF IMPACT ON NATIONAL HERITAGE VALUES OF THE SYDNEY OPERA HOUSE

The following is the Summary Statement of Significance of the National Heritage values of the Sydney Opera House. *Emphasis added* on aspects of significance relevant to the assessment of heritage impact of the works in this current application.

The Sydney Opera House, constructed between 1957 and 1973, is a masterpiece of modern architectural design, engineering and construction technology in Australia. It exhibits the creative genius of its designer, the Danish architect Jørn Utzon and the contributions to its successful completion by the engineering firm Ove Arup and Partners, the building contractors M.R. Hornibrook, and the architects Hall, Todd and Littlemore. It is an exceptional creative and technical achievement in the national history of building design and construction in Australia.

Since its completion the Sydney Opera House has attracted world wide acclaim for its distinctive design, enhanced by its prominent location on Bennelong Point within a superb harbour setting. With its soaring white roof shells set above a massive podium, the Sydney Opera House is a monumental urban sculpture, internationally acclaimed as an architectural icon of the twentieth century. Its many national and international awards reflect its pivotal place in the national story of creative and technical achievement in Australia. The challenges involved in executing Utzon's design inspired innovative technical and creative solutions that were groundbreaking in the history of architectural design and building construction in Australia, particularly the roof shells that were based on the geometry of the sphere and demonstrated the extraordinary creative potential of the assembly of prefabricated, repeated components.

The interior spaces also reflect the creative genius of Utzon and his successors, Todd, Hall and Littlemore, who completed the building after Utzon's departure from the project in 1966.

The Sydney Opera House is the most widely recognised building in Australia, and is cherished as a national icon and world-class performing arts centre. It represents an enduring symbol of modern Sydney and Australia, both nationally and internationally, reflecting changing social attitudes towards Australian cultural life in the decades after World War II. The Sydney Opera House has played a seminal role in the development of Australia's performing arts, enhancing the cultural vitality of the nation. It continually attracts nationally and internationally acclaimed performers, and is a mecca for visitors from around Australia and overseas.

The peninsula on which the Sydney Opera House now stands has a special association with Bennelong, an Aboriginal man who became a prominent and influential figure in the early colony and played a significant role in mediating interactions between Aboriginal people and early settlers.

Comment

The proposed projects in this application, particularly alterations to the Box Office, and tunnels and lift connections between the various foyer and auditorium levels, will have substantial impacts on significant spaces and their fabric, however the functional benefits will be substantial and will greatly improve the visitor and patron experience.

It will be very important that the details throughout all these projects are resolved to a consistent language and very high quality and comply with the Utzon Design Principles and the CMP. This is being reviewed during the detail design development stage by means of regular 'design consistency' workshops, attended by the SOH heritage architect and members of the Eminent Architects Panel.

Combined with the Theatre Machinery Project (subject of a separate application) these projects will enhance the patron experience and performance and operational capability of the Sydney Opera House to continue to host and celebrate world standard performance art. In this respect this proposal will help sustain the iconic international standing of this Opera House.

See the more detailed listed values of the place under each of the individual National Heritage criterion below. Design 5's assessment of heritage impact is summarised at the end of that section.

8.1 National Heritage criteria

The Sydney Opera House is registered on the National Heritage List for meeting its listing criteria A, B, E, F, G and H.

The values of the Sydney Opera House that meet the National Heritage criteria are set out in full in Appendix C of the Management Plan for the Sydney Opera House (August 2005) and also in the listing of the Sydney Opera House on the National Heritage List, available at <http://www.deh.gov.au/cgi-bin/ahdb/search.pl>

The extracts from the National Heritage values, under each of the criterion below, summarise and draw attention to the aspects of significance that are relevant to the assessment of heritage impact of this suite of projects. Design 5's assessment of heritage impact is summarised at the end of this section.

NHL Criterion A Events, Processes

The place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "The Sydney Opera House represents a masterpiece of modern architectural design, engineering and construction technology in Australia."
- "The challenges involved in executing the design inspired innovative developments in technologies, construction engineering and building methods in Australia, creating the building's distinctive form, fabric and structural systems."
- "a seminal role in Australia's performing arts history, enhancing the cultural vitality of the nation and continuously attracting nationally and internationally recognised performers from around the world"

Comment

The suite of projects included in this application will not have any adverse impacts on these values and will potentially enhance the ability of the Sydney Opera House to attract national and internationally recognised performers with its improved functionality and accessibility.

NHL Criterion B Rarity

The place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "With its distinctive sail-like concrete shell roofs standing boldly upon a massive granite-faced platform, located prominently on the Sydney Harbour foreshore, the Sydney Opera House is the most widely recognised building in Australia, and one of the most definitive national architectural icons of the twentieth century. It is also a rare example of a national cultural centre that has gained widespread recognition and respect as a performing arts venue."

Comment

The suite of projects included in this application will not have any adverse impacts on these values and will likely enhance the Opera House's recognition and respect as a performing arts centre accessible to all.

NHL Criterion E Aesthetic characteristics

The place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Relevant key values from National Heritage values:

- "With its distinctive sail-like concrete shell roofs standing boldly upon a massive granite-faced platform, located prominently on the Sydney Harbour foreshore, the

Sydney Opera House is the most widely recognised building in Australia, and one of the most definitive national architectural icons of the twentieth century."

- "The building's ability to emotionally move people and invoke a strong aesthetic response is enhanced by the experience of approaching, entering and moving around the building and surrounds."
- "...the majestic quality of the soaring internal spaces including the folded concrete beams throughout the building, and the reinforced radial cranked beams in the northern foyers. These are complemented by the vast coloured glass panels in the main foyers of the Concert Hall and Opera Theatre wings, through which the harbour and city views reinforce the building's magnificent setting."
- The distinctive interiors including the foyers surrounding the major auditoria, the Reception Hall (now the Utzon Room), the Box Office foyer, and the Bennelong Restaurant designed by Utzon and Peter Hall, enhance the relationship between the interior and exterior of the building."

Comment

The suite of projects included in this application will have some adverse impacts on the radial cranked beams in the JST northern foyer at its western end, but only minimal adverse impact on the experience of entering and arrival at the Opera House. These experiences in the ascent of the main stairs and in the Box Office foyer should be enhanced by these works and be accessible to a wider public than before, now including those with limited mobility.

NHL Criterion F Creative or technical achievement

The place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period.

Relevant key values from National Heritage values:

- "The 'hybrid' interior spaces of the Sydney Opera House reflect the creative genius of both Utzon and Todd, Hall and Littlemore, who completed the building and interior finishes after Utzon's departure. The major public spaces with outside views, for example were designed by Utzon (and completed by Peter Hall) to be finished in natural materials, textures and colours similar to those on the exterior of the building in order to bring the outside inside (Kerr 2003, 69)."
- "the creation of sensory experiences to bring pleasure to the building's users, particularly the experience of approaching, mounting the grand staircase to the podium, passing through the low ribbed box office, up to the foyers flanking the auditoria with their harbour views, and the climax of the performance itself. 'Both ideas were...reinforced by Utzon's application of counterpointing techniques using light and dark tones, soft and hard textures and richly treated warm and cool interior colours.'"
- "The interior spaces designed by Peter Hall, including the major auditoria known as the Concert Hall and Opera Theatre, and the minor performance spaces, performers' and staff areas, and rehearsal rooms, known collectively as 'Wobbly Land' because of the distinctive 'U' shaped timber panelling, demonstrate the distinctive design solutions that made the Opera House a functioning performing arts centre in the 1970s, and reflect the prevailing aesthetic values, building standards, and financial constraints of the day."

Comment

The suite of projects included in this application will generally retain and respect these values.

While acknowledging there will be some negative impacts in regard to introduction of Lift 31 and the consequent cutting of three of the significant cranked beams in the JST northern foyer, and the diminished width of the stairs in the JST western side foyer resulting from the new passage / tunnel on Level 3, the overall impacts will be positive. Utzon's original concepts will be strengthened and made accessible to a broader public than before, and Peter Hall's contributions will be retained and respected in back-of-house areas.

NHL Criterion G Social value

The place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Relevant key values from National Heritage values:

- "building's role as a cultural icon is also derived from the numerous performances conducted there (100,000 since 1973), and the place's role as a focal point for community events. The Sydney Opera House is a mecca for both Australian and international visitors to Sydney, attracting over 100 million visitors since the opening in 1973."

Comment

The suite of projects included in this application should strengthen the Sydney Opera House's role as a cultural icon accessible to all, and potentially enhance its ability to attract both national and international visitors and performers.

NHL Criterion H Significant people

The place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "The Sydney Opera House is directly associated with Jørn Utzon"
- "The peninsula on which the Sydney Opera House now stands has a special association with Bennelong"

Comment

The proposed suite of projects will not have any adverse impacts on these values.

8.2 Summary assessment of heritage impact on National Heritage values

While acknowledging there will be some negative impacts in regard to introduction of Lift 31 and the consequent cutting of three of the significant cranked beams in the JST northern foyer, and the diminished width of the stairs in the JST western side foyer resulting from the new passage / tunnel on Level 3, the overall impact of these projects will be positive.

The improved functionality and accessibility of both public and back-of-house areas, particularly in relation to the JST, will potentially enhance the reputation and ability of the Sydney Opera House to attract national and international visitors, patrons and performers.

9.0 DISCUSSION OF IMPACT ON STATE HERITAGE VALUES OF THE SYDNEY OPERA HOUSE

The following is the Statement of Significance of the State Heritage values of the Sydney Opera House. *Emphasis added* on aspects of significance relevant to the assessment of

heritage impact of this project.

*The Sydney Opera House is of State significance as a twentieth century architectural masterpiece sited on a prominent peninsular in Sydney Harbour. In association with the Sydney Harbour Bridge it has become an internationally recognised symbol of Sydney and Australia, which is also widely admired by local citizens. Designed for the NSW Government by renowned Danish architect Jørn Utzon between 1957 and 1966, and completed in 1973 by Hall, Todd and Littlemore, the building has exceptional aesthetic significance because of its quality as a monumental sculpture in the round, both day and night, and because of the appropriateness of its design to its picturesque setting. **Its public spaces and promenades have a majestic quality, endowed by powerful structural forms and enhanced by vistas to the harbour and the city.** An icon of modern architecture, the Sydney Opera House uses the precise technology of the machine age to express organic form. It has scientific and technical significance for the ways in which its construction continually pushed engineering and building technologies to the limit. It also has significance for the extensive associations of the site with many famous people and important themes in Australian history. Abutting the site of the first settlement of Europeans in Australia at Sydney Cove, the Sydney Opera House stands on Bennelong Point, Aboriginal land which was named after a Wangal Aboriginal man and which is of significance in the history of the entanglements and interactions between Aboriginal and non-Aboriginal cultures in Australia. Other historic themes associated with the site include the arrival of the First Fleet in Sydney Cove, scientific investigation, defence, picturesque planning, marine and urban transport and most recently, cultural showcasing. Since its official opening by the Queen in 1973, the Sydney Opera House has been the scene of many notable achievements in the performing arts and has associations with many nationally and internationally renowned artistic performers. **The Sydney Opera House provides an outstanding visual, cultural and tourist focal point for Sydney and Australia.***

Comment

The CMP 3rd edition was developed in preparation for the listing of the Sydney Opera House on the NSW State Heritage Register (SHR), on 3 December 2003. The CMP draft 4th edition has retained and further developed the methodology and policies in the 3rd edition, however it has not yet been formally adopted. Hence, the CMP 3rd edition is used as the basis for discussion and assessment of the heritage impact of the proposed suite of projects in this application on the State Heritage values of the Sydney Opera House.

9.1 State Heritage Register criteria

The Sydney Opera House is listed on the SHR for meeting all its listing criteria (a)-(g). The values of the Sydney Opera House that meet the SHR criteria are set out in full in the NSW Heritage Database, available online at:
<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5054880>

The extracts from the SHR values, under each of the criterion below, summarise and draw attention to those aspects of significance that are relevant to the assessment of heritage impact of the suite of proposed projects in this application. Design 5's assessment of heritage impact is summarised at the end of this section.

SHR criterion a) Historical significance

An item is important in the course, or pattern, of NSW's cultural or natural history.

Relevant key values from SHR values:

- none relevant

Comment

There are no significant historical values from the SHR listing that are impacted by this proposal.

SHR criterion b) Associative significance

An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.

Relevant key values from SHR values:

- "its success as a performing arts centre has been described as 'spectacular' partly because of the building's 'ability to attract great artists from all over the world'."

Comment

The suite of projects included in this application will potentially enhance the ability of the Sydney Opera House to attract national and internationally recognised performers with its improved functionality and accessibility.

SHR criterion c) Aesthetic significance

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.

Relevant key values from SHR values:

- "Its public spaces and promenades have a majestic quality endowed by powerful structural forms and enhanced by vistas to the harbour and the city."
- "Its aesthetic quality is largely attributed to the 1957 prizewinning design by Jørn Utzon."
- "Its aesthetic quality was also enhanced by the high quality completion work by Hall, Todd & Littlemore, by the technical support given throughout by the internationally renowned engineering firm of Ove Arup & partners, and finally by M.R. Hornibrook, the contractor of stages two and three (Kerr, 2003, 32)."
- "Widely recognised as a masterpiece of twentieth century architecture, the Sydney Opera House combines an expressive freedom of form with the precise technology of the machine age."

Comment

The suite of projects included in this application will generally retain and respect these values.

While acknowledging there will be some negative impacts in regard to introduction of Lift 31 and the consequent cutting of three of the significant cranked beams in the JST northern foyer, and the diminished width of the stairs in the JST western side foyer resulting from the new passage / tunnel on Level 3, the overall impacts will be positive.

Utzon's original design concepts will be strengthened and made accessible to a broader public than before, and Peter Hall's contributions will be retained and respected in back-of-house areas.

SHR criterion d) Social significance

An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.

Relevant key values from SHR values:

- “As a world-class performing arts centre, the Sydney Opera House has enhanced the cultural vitality of the nation.”
- “In offering this remarkable accessibility to a broad public, Sydney Opera House can be seen to be fulfilling Cahill's hope that it would be “a monument to democratic nationhood”.”

Comment

The suite of projects included in this application should strengthen the reputation of Sydney Opera House as a world-class performing arts centre enhancing Australia's cultural vitality.

The accessibility projects in particular will make the main foyers and the JST more accessible to a broader public, and potentially strengthen its ability to fulfil Cahill's hopes.

SHR criterion e) Research potential

An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.

Relevant key values from SHR values:

- none relevant

Comment

There are no significant research potential values identified from the SHR listing that are impacted by this proposal.

SHR criterion f) Rarity

An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.

Relevant key values from SHR values:

- It is an exceptional landscape (and seascape) monument because of its quality as a sculpture in the round, both day and night, and because of the appropriateness of its design to its setting and the picturesque quality of the setting.

Comment

There are no significant rarity values from the SHR listing that are impacted by this proposal.

SHR criterion g) Representativeness

An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments.

Relevant key values from SHR values:

- “... an internationally recognised building representative of major performance arts centres.”
- “It is outstanding because of its innovative design appropriate both to its entertainment functions and to its harbour-side setting, and because of the esteem in which it is held in Australia and internationally.”
- “Its success as a performing arts centre has been described as ‘spectacular’ partly because of the building's ‘ability to attract great artists from all over the world’.”

Comment

The improved functionality and accessibility of both public and back-of-house areas, particularly in relation to the JST, will potentially enhance the reputation and ability of the Sydney Opera House to attract great artists and performers from all over the world.

9.2 Summary assessment of heritage impact on State Heritage values

There will be some negative impacts in regard to introduction of Lift 31 and the consequent cutting of three of the significant cranked beams in the JST northern foyer, and the diminished width of the stairs in the JST western side foyer resulting from the new passage / tunnel on Level 3, however the overall impact of these projects will be positive.

The improved functionality and accessibility of both public and back-of-house areas, particularly in relation to the JST, will potentially enhance the reputation and ability of the Sydney Opera House to attract national and international visitors, patrons and performers.

The assessment of heritage impact on individual spaces and fabric is discussed in the section below (compliance with CMP 3rd edition).

10.0 DISCUSSION OF COMPLIANCE WITH SYDNEY OPERA HOUSE CONSERVATION PLAN (CMP) 3RD EDITION

The CMP identifies and defines the significant values of the Sydney Opera House and then formulates policies framed to retain these values. The following discussion assesses the impact of the proposed suite of projects in the following order:

- Significant values,
- Significant elements of the place, and
- Relevant policies.

10.1 Significant values – discussion of impact

The following Statement of Significance from CMP 3rd edition summarises the significant values of the place (emphasis in bold type added as it relates to this assessment):

The Sydney Opera House is a dramatic expression of the genius of a then relatively unknown architect, Jørn Utzon (whose subsequent international fame was in part a result of the design of the building), of the high quality completion of the work by Hall, Todd and Littlemore, and of the technical support given throughout by the internationally renowned engineering firm of Ove Arup and Partners and finally by M.R. Hornibrook, the inventive contractor of stages two and three.

The Sydney Opera House is of exceptional significance because of:

- *its spectacular quality as sculpture in the round both by day and night;*
- *its inspired design solution in response to its setting;*
- *the picturesque quality of the peninsula setting;*
- *the way in which its fabric reflects the contemporary philosophy of creating refined forms from machine-made components;*
- *the way in which the plastic arts, geometry and technology were drawn on to create a structure at the leading edge of endeavour;*
- *the majestic quality of its public spaces contained by powerful structural forms;*
- *the evidence of its fabric in expressing its place in twentieth century architecture (not excluding the troubled history of its construction);*

- *the seminal influence of some of its design and construction techniques;*
- *its function as a performing arts centre of world renown;*
- *its almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development; and from its power to attract artists, patrons and tourists on a national and international level.*

This significance is intensified by the extensive associations of the site and its structures, including:

Aboriginal and European contact (Bennelong and his house); scientific investigation (Flinders and Baudin); defence (Phillip's 1788 redoubt to Greenway's Fort Macquarie, 1817–1901); Picturesque planning (Macquarie to Utzon); marine and urban transport (overseas shipping and local ferry wharves, tram terminal and depot); popular recreation; and, finally, the nation's most famous cultural icon (The Opera House) and its legions of national and international performers.

Those values noted above in bold type are relevant to the proposed suite of projects. Taking each of them separately, the following comments are made:

- *the majestic quality of its public spaces contained by powerful structural forms;*

Comment:

The public spaces affected by this suite of projects include the following:

- Stair from Vehicle Concourse to Box Office foyer,
- Box Office foyer,
- JST southern foyer,
- JST western side foyer,
- JST northern foyer
- JST auditorium

Each of these spaces retains its majestic quality and the powerful structural forms that define it.

- *the evidence of its fabric in expressing its place in twentieth century architecture (not excluding the troubled history of its construction);*

Comment:

Wherever possible in this suite of projects, the evidence of evolution and manufacture of its fabric is retained and exposed. The presence and character of this fabric will be enhanced by sophisticated indirect lighting.

- *its function as a performing arts centre of world renown;*

Comment:

The proposed suite of projects in this application will improve the functionality and accessibility of the Box Office foyer, Joan Sutherland Theatre and its associated foyer and back-of-house performers' spaces. The projects also include adaptation of a soon to be vacated space within the podium for Opera House related staff and management use.

These will potentially have a positive impact on the function and status of Sydney Opera House as an internationally recognised performing arts centre.

- *its almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development; and from its power to attract artists, patrons and tourists on a national and international level.*

Comment:

The comments made about the previous point apply to this one as well.

The Box Office foyer and JST accessibility projects will ensure the Opera House is available and accessible to a much broader public. This in turn should enhance its reputation at both a national and international level and *its power to attract artists, patrons and visitors on a national and international level.*

10.2 Significant elements – discussion of impact

Broadly the elements and areas listed below (following the main headings in the *Schedule of levels of significance* in the CMP 3rd edition), will be potentially affected to varying degrees by the proposed works:

- The form, fabric and structural systems of the Opera House
- Podium exterior
- Original concept of sequential experiences on arrival, entry and circulation
- Four stairways from vehicle concourse to Box Office
- Box Office foyer
- Foyers surrounding the major auditoria
- Opera Theatre (JST)
- Performers' and staff areas
- Lavatories, locker rooms and dressing rooms
- Lighting control and projection rooms
- Service areas

Each element is discussed below in relation to this proposal. At the end of each discussion section a table sets out the components of each element and their significance as listed in the CMP, with comments on the impact on each. The significance rankings are taken from the CMP 3rd edition and are as follows:

- A – Exceptional significance
- B – Considerable significance
- C – Some significance
- D – Little significance
- Int – intrusive element

10.2.1 The form, fabric and structural systems of the Opera House

The proposed works and their impacts are noted below.

The proposed works to the Box Office Foyer and the Utzon Room stair include:

- Removal of the eastern (Utzon Room) stair and supporting structure from the Vehicle

Concourse to the Box Office Foyer and replacement with a pair of escalators within the existing envelope of the space, retaining wall and ceiling structure and finishes. This is a high impact to moderately significant structure but is not publically visible.

- Penetration through floors and structure, and alterations to JST Southern Foyer glass wall for new Lift 36. These penetrations do not affect the folded beam structure and are considered to have moderate impact.
- Removal of fitout, walls and associated structure within and to north of box office to form new Utzon Lounge area, including access to Lift 1 and BoH. This is a high impact to structure of low significance.

The proposed works associated with accessibility within the JST foyers include:

- Alterations to glass wall in Southern Foyer for new Lift 36. Moderate impact.
- Relocation of glass doors from Lift 36 position to side wall of foyer to maintain egress widths. Moderate impact that will likely be seamless and not be noticed.
- Construction of new tunnel at Level 2 to provide level access between JST Southern and Northern Foyers – steps, structure and auditorium wall to be altered. High impact but with substantial accessibility benefits.
- Construction of new tunnel at Level 3 to provide level access between Northern Foyer and accessible seating within JST – steps, structure and auditorium wall to be altered. Very high impact but with substantial accessibility benefits.
- Construction of new Lift 31 – three cranked beams at each Northern Foyer level to be cut to accommodate lift shaft, glass wall to be altered and extended to enclose lift. Very high impact but with substantial accessibility benefits.

The proposed works associated with the Eastern Accommodation include:

- Alterations to Lift 3 to allow access to new accommodation. Low impact.
- Relatively minor alterations to structure to accommodate new offices. Low impact.
- Two new granite hooded window openings on eastern wall of Podium. High impact but their proportion and detail should retain the visual solidity of the podium.

Those structural components that will be altered as part of these projects have been assessed and rectification works designed by Arup engineers.

Element	Significance	Potential impact of proposal	Comment
The form, fabric and structural systems of the Opera House, including	A	High	A number of structural elements in the JST will be altered – particularly in western side and northern foyer spaces.
roof shells with pedestals, ribs, boxed beams, warped surfaces, tile lids and lightning conductors	a	none	Not affected by proposal
bronze louvre walls infilling shell ends	a	none	Not affected by proposal
podium clad and paved with monumental precast granite	a	Moderate – neutral	Some paving within the west side and northern foyers of the JST will be altered or removed. Paving on south side of JST southern foyer will be removed for new lift. The east façade of the podium will be affected with limited new openings.
folded beams throughout the building	a	none	Not affected by proposal
reinforced radial cranked beams in northern foyers	a	High – negative	3 beams on each level of JST northern foyer will be cut to allow new Lift 31.

glass walls and supporting structures	b	Moderate – neutral	Glass wall to JST southern foyer will have minor alterations to accommodate new Lift 36. Relocated door to side glass wall will sit beneath main bronze transom and beside an existing pair of doors. Glass wall and supporting structure on west side of JST northern foyer will have moderate alterations for new Lift 31.
surface treatment of exterior pedestal feet	int	none	Not affected by proposal

10.2.2 Podium exterior

The proposed works that affect the podium exterior are confined to the JST side of the building.

Two new hooded horizontal openings are proposed on the eastern elevation of the podium. Their details will match existing windows and their proportions and configuration should not diminish the visual solidity of the podium.

The steps in the JST west side foyer and within the northern foyer read as a continuation of the full width stepped surface profile of the podium. These will be interrupted by the new tunnels and the lift in the northern foyer. The details of these incisions into the stepped podium surface need to be resolved at the detail design stage and should be consistently applied across the site where these situations occur.

Element	Significance	Potential impact of proposal	Comment
Podium exterior	A	high	New hooded window openings on east side of podium
solid character of side walls with precast granite slabs of monumental size, including hoods to openings	a	High – neutral	New openings on eastern side are proportioned, detailed and positioned to maintain visual solidity of podium
use of large scale precast granite slabs for paving and steps	a	Medium – neutral	Scale and material are maintained in alterations
uninterrupted sweep of steps from bottom to top and from side to side	a	Medium – negative	Monumental steps are not affected by proposal. Steps in side JST west side and northern foyer are interrupted by new tunnels and Lift 31
open character bronze railing on podium edge and at the extremities of the steps	a	none	Not affected by proposal
access steps and balconies on the northern walls of the podium	a	none	Not affected by proposal
bronze vehicle doors to the central passage and Bennelong dock	b	none	Not affected by proposal
existing pedestrian entries off the western broadwalk	b	none	Not affected by proposal
design of picket additions to fence at the northern lip of the podium	int	none	Not affected by proposal

design of radial palisade fencing introduced where the northern ends of the podium decks meet the [external] steps	int	none	Not affected by proposal
large black sign pylon with strong silhouette and comic hammer head (security camera) on landing of monumental steps	int	none	Not affected by proposal

10.2.3 Original concept of sequential experiences on arrival, entry and circulation

The proposed works will substantially improve the accessibility of this sequence of spaces to a wider public, particularly those with mobility issues. This is a very positive impact.

The alterations required to achieve this have some negative impacts, particularly their visual impact on the broad unbroken sweep of stairs in the western side foyer and northern foyer of the JST, and also on the impressive sweep of unpainted off-form cranked concrete beams that dominate the lower levels in the northern foyer.

To mitigate these impacts, the Level 3 tunnel in the side foyer has been confined to the eastern side of the stair flights – immediately adjacent to the loge stair auditorium, and the Level 2 tunnel concealed behind the auditorium wall. These impacts are considered acceptable when balanced against the substantial improvement in accessibility achieved.

Lift 31 is proposed as a minimal glass lift and has been located as far as possible towards the western edge of the northern foyer to minimise its visual impact on the cranked beams within the limits of the height plane of the glass wall above. These impacts are considered acceptable when balanced against the substantial improvement in accessibility achieved.

Element	Significance	Potential impact of proposal	Comment
Original concept of sequential experiences on arrival, entry and circulation	A	High – positive	Sequence of spaces is not affected. Accessibility to this sequence of experiences considerably improved
Forecourt, podium steps, podium deck, box office foyer, stairways, level 30 foyers, auditoria	a	High – positive	Sequence of spaces is not affected. Accessibility to this sequence of experiences considerably improved
Vehicle concourse, stairways to box office foyer, box office foyer, stairways, level 30 foyers, auditoria	a	High – positive	Sequence of spaces is not affected. Accessibility to this sequence of experiences considerably improved

10.2.4 Four stairways from vehicle concourse to Box Office

The proposed pair of escalators in the eastern most (Utzon Room) stair will provide improved accessibility and allow the two largest stairs to remain unaltered. This is considered a high but positive impact.

The proposed retention of wall and ceiling details and finishes, and consistent lighting with the other stairs, will retain the design integrity of Utzon's work in this space.

The details of the escalators should match those in from the Box Office to the southern foyers as much as possible.

Element	Significance	Potential impact of proposal	Comment
Four stairways from vehicle concourse to Box Office	A	high – positive	None of the original podium or shell structure is altered Removed structure does not play a role in the main structural systems of the Opera House
Folded unpainted concrete beams	a	none	Not affected by proposal
linear ascents flanked by pre-cast granite walling concealing lighting intended to illuminate and emphasise beams	b	none	Not affected by proposal
bronze handrails with concealed lighting	b	high	Handrail details will necessarily change where escalators are installed, but lighting system should relate to other stairs.
temporary control for experimental optical fibre lighting system	int	high – positive	To be removed by upgraded lighting in proposal
temporary portable floodlights clipped to walls	int	high – positive	To be removed by upgraded lighting in proposal
makeshift emergency exit signs	int	high – positive	To be revised by upgraded lighting in proposal

10.2.5 Box Office foyer

The Box Office foyer is ranked as exceptionally significant and is a major space in Utzon's arrival sequence.

The proposed changes to this space are substantial and in the definition of the CMP, constitute 'major change'. They remove and replace all of the Peter Hall fitout, except for the brush box walls on the south side of the space, with new fitout generally aligning with Utzon's design principles. The only exception is the introduction of carpet and felt in the lounge areas – a material that is inconsistent with Utzon's palette of external materials for this space. However these softer absorbent materials are for acoustic purposes and are restricted to lounge areas. The main circulation areas retain the original precast granite paving slabs.

The functionality of the space is improved, distracting elements removed, and the strong Utzon character is retained and strengthened. In summary, a high but positive impact.

Element	Significance	Potential impact of proposal	Comment
Box Office foyer	A	high – positive	Major reconfiguration of space and re-organisation of functions – character and function are maintained and enhanced
folded unpainted concrete beams	a	none	Not affected by proposal – maintained as defining element of space
low east-west rectilinear space with precast granite paving and cladding	a	none	Configuration of space altered but character retained and respected
low general light levels in relation to southern foyers	a	none	Lighting already revised

ticket sales counter	c	high – positive	To be revised and relocated
lettering commemorating opening by HM Queen Elizabeth II (1973)	c	none	Not affected by proposal
poster display	c	none	Already removed
blue and white box signs	d	none	Already removed
cloak area fitout	d	high – positive	To be revised and relocated
information desk	d	high – positive	To be removed and relocated
program seller's booth	d	none	To be resolved with furniture
treatment of details for Cafe Mozart	d	high – positive	Café removed
coffee bar beside cloak area	d	high – positive	To be removed
location of Cafe Mozart	int	high – positive	To be removed
method of fixing posters	int	none	Already removed
partitioned-off section for shop, and storage and service areas for reception hall	int	high – positive	To be removed
retail display at information desk	int	high – positive	To be removed

10.2.6 Foyers surrounding the major auditoria

These spaces are ranked as exceptionally significant and are a unique characteristic of Utzon's design.

Works are generally confined to the southern foyer, west side foyer and west side of the northern foyer. Refer to discussion in Section 9.2.1 of this report for a summary of the proposed works.

There are major accessibility benefits with these works, however there are a number of impacts, some of them negative. These impacts can be summarised as follows:

- Southern foyer – new lift 36 in glass wall and relocation of podium door set – neutral impact as the quality and character of the space and significant fabric is respected and not diminished.
- Western side foyer – concealed passage at Level 2 and modifications to the brush box panelling – stepped podium platform is cut through and geometry made difficult by existing configuration of Loge Stair but this will not be visible, neutral impact as quality and character of space is retained and respected.
- Western side foyer – exposed passage at Level 3, involving slicing through the podium stairs and modifications to the brush box panelling. Location governed by existing structure and configuration of Loge Stair – high impact as continuity of steps is interrupted and overall width of staircase reduced, but quality and character of space is retained and respected.
- Northern foyer – introduction of new glass Lift 31, requiring cutting of 3 unpainted and exposed radial cranked concrete beams, slicing through the podium stairs, alteration of the glass wall structure and partial infill of the indented glass wall to enclose the shaft. Of these impacts, the most significant is the cutting of the beams and slicing through the stairs. The beams are a significant and powerful structural expression in this space, however the placement of the lift has been carefully considered to minimise its physical impact and visual interruption of these beams within the limits imposed by the curved

roof shell ribs and sloping glass plane of the ceiling above. The lift will not penetrate the broad plane of glass when seen from the outside and its presence should be largely concealed from the north.

It is essential that the expression of the cuts through the stairs and beams is carefully resolved and detailed not to distract from or diminish the quality and character of these elements or the space. The sense of horizontal continuity of the stairs beyond the glass walls is an essential part of these stairs and is to be retained as much as possible.

Element	Significance	Potential impact of proposal	Comment
Foyers surrounding the major auditoria [JST side only]	A	high – negative	Opportunity to reduce visual intrusion of services into upper reaches of the foyer spaces
Upper termination of folded beams forming canopies to stairs from Box Office to southern foyers	a	none	Not affected by proposed works
Cathedral character of space under soaring rib vaults	a	low – positive	Opportunity to reduce visual intrusion of services into upper reaches of the foyer spaces
Unpainted off-form concrete vaults with fan shaped pedestals	a	none	Opportunity to improve visual presence of these from public spaces
precast granite paving	a	medium	Not affected by proposed works
unpainted off form concrete radial cranked beams in the northern foyers	a	high - negative	3 beams to be cut at each level on west side to accommodate Lift 31
stairs from Box Office foyer to southern foyers	a	none	Not affected by proposed works
glass wall system with steel mullions and bronze fittings and a non-reflecting zone	b	medium	Minor modifications required below bronze transom in southern foyer to accommodate Lift 36. More substantial modifications required at west end of northern foyer to accommodate Lift 31.
Olsen's and Jagamara's murals in the northern foyers	b	none	Not affected by proposed works
square section bronze rails at base of glass walls (1973)	b	none	Not affected by proposed works
bronze and black leather bench seats (1973)	c	none	Not affected by proposed works
small circular bronze based tables (1973)	c	none	Not affected by proposed works
circular bar counter and lighting tree (1973)	c	none	Not affected by proposed works
bust of Eugene Goossens	c	none	Not affected by proposed works
black leather lounges in northern foyers	c	none	Not affected by proposed works
mobile bar	d	none	Not affected by proposed works
colour-coded box signs (1973)	d	none	Not affected by proposed works
brush box cladding to auditoria carcase (form and vertical extent)	d	moderate - neutral	Minor modifications to west side foyer where tunnels introduced and doors revised
foyer light fittings	d	none	Not affected by proposed works
program seller's booth	d	none	Not affected by proposed works

circular drink tables with terrazzo base	d	none	Not affected by proposed works
relationship of major auditoria carcasses above brush box walls to interior of the roof shells	int	high – positive	Opportunity to reduce visual intrusion of services into upper reaches of the foyer spaces
relationship of carpets to northern foyers	int	none	Carpets retained on lower levels
bronze rails in side foyers, after 1973	int	high – positive	To be revised as part of site wide handrail review
ad hoc supplementary lighting	int	none	Upgraded infrastructure needed
advertising banners for sponsors	int	none	Not part of this project
debris and fixings remaining from past activities	int	high – positive	To be cleaned up – at least for now
carpet-clad additions in northern foyers to provide storage	int	high – positive	To be removed
carpet cladding to columns	int	high – positive	Carpet to be removed

10.2.7 Opera Theatre (Joan Sutherland Theatre)

This proposed works in the JST auditorium include the following:

- Modification to 6 rows of seating (3 front stalls and 3 rear stalls) to provide removable accessible wheelchair platforms, associated guard rails and companion positions. Red upholstered white birch plywood seating itself will be retained with modified supports and fixings to enable rapid changeover in response to bookings. Moderate but acceptable impact.
- Construction of additional follow spot room at rear of auditorium over the last rows of seating in the circle. This involves removal of a section of the original yellow carabeen plywood (stained black) linings, and the new work will be finished in matt black plywood to match adjacent surfaces. The removed panelling should be salvaged and carefully stored for repairs elsewhere in the JST if and when required. Head height over last seating row will be reduced. It is important to note that as this auditorium is painted matt black, the new follow spot room will be largely unnoticed. Moderate but acceptable impact.
- Replacement of the existing original fire curtain and associated machinery, in the same location. This will not affect the location of the original Curtain of the Sun. Low impact.

These works, in association with works to the associated lifts and foyers, will considerably enhance accessibility to the JST and make performances available to a broader public. They will also tidy up existing ad-hoc arrangements for follow spots at the rear of the auditorium.

The backstage areas, including above-stage and below-stage machinery are the focus of a separate application – the Theatre Machinery Project.

Element	Significance	Potential impact of proposal	Comment
Opera Theatre (JST)	C	moderate – neutral	Impacts restricted to accessibility seating, follow spot room, fire curtain
Seating of white birch and red upholstery	b	moderate	Seating itself retained. Impacts evident only when accessible seating implemented as per demand and bookings

Entire uninterrupted space on the auditorium side of proscenium	b	low	Head height reduced over rear rows of seating but low visual impact
Form of ceiling and walls and original housings for services	b	moderate	Ceiling / wall over rear circle altered, but functional benefits with improved control and operation of follow spots
Unpainted precast concrete surfaces of circle balustrade and box fronts	b	none	Not affected by proposed works
Floors of laminated brush box	b	low	Added fixing points in floors for accessible seating platforms and rails – low impact
Proscenium configuration	b	none	Fire curtain replacement has no impact on proscenium
Waagner-Biro designed and installed stage machinery including revolve and elevator platforms	b	low	Fire curtain requires replacement to meet compliance – very minor impact on fly lines and machinery Theatre Machinery Project (separate application) has major impact.
Coburn's <i>Curtain of the Sun</i> (removed)	b	none	Ability to re-hang and operate this significant curtain in its original location is retained.
Sur-title screen	d	none	Not affected by works
Stage, backstage and storage space	d	low	Modifications to improve accessibility to orchestra pit impact on original but not significant fabric. Theatre Machinery Project (separate application) has major impact.

10.2.8 Performers' and staff areas

Minor alterations are proposed to provide accessible performers' facilities on Level +30. These works include:

- 2 dressing rooms and associated bathroom on Level +30 refurbished to accommodate 1 dressing room with accessible bathroom, and new lift pit for Lift 31 with adjacent staff / service room;
- former office on Level +30 converted to accessible WC facility adjacent to Green Room

In affected areas, it will be important to continue the Hall design regime with simple finishes. The drawings and sample palette provided suggest this is the intent.

New staff areas are proposed in the Eastern Accommodation areas, spaces made available with the removal of redundant stage equipment as part of the Theatre Machinery Project. In these areas, it will be important to continue the Hall design regime, at least in a modified form, with simple finishes. The documents provided suggest this is the intent.

Element	Significance	Potential impact of proposal	Comment
Performers' and staff areas	B-C	low	Main dressing rooms and staff areas remain unaffected.
Character of white painted off-form concrete with services concealed by moulded white birch panels (wobblies) in front of wall and / or below ceiling – the latter with lighting strips and	b	low	Most areas remain unaffected. In affected areas, it will be important to continue the Hall design regime with simple finishes.

sprinklers set between them. Smaller spaces may be treated with unmoulded white birch veneer to selected surfaces.			
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10.2.9 Lavatories, locker rooms and dressing rooms

Most of the original lavatories, locker rooms and dressing rooms with their Peter Hall fitout remain unaffected by the proposed works. Only two of the original performers' dressing rooms, one with its associated bathroom, are affected. Minimal impact.

Original fitout, fittings and fixtures should be retained where it is possible to maintain code compliance, and where it is not, then new fittings and fixtures that are compatible with the originals should be used.

The Peter Hall design regime should be extended into new spaces and facilities in accordance with the CMP. See comment under 9.2.8 above.

Element	Significance	Potential impact of proposal	Comment
Lavatories, locker rooms and dressing rooms	C-D	low	Only two original performers' dressing rooms, one with associated bathroom are affected.
all 1973 joinery, fittings, fixtures and furniture	b	low	Original joinery fittings and fixtures to be retained where this is possible.
metal towel dispenser units design	int	low	Most areas remain unaffected. New towel dispenser units will be installed in affected areas.

10.2.10 Lighting control and projection rooms

Existing control rooms will have minor upgrades as part of exempted works and are not included in this application. Significant fabric remains unaffected.

Element	Significance	Potential impact of proposal	Comment
Lighting control and projection rooms	C-D	none	
Small spaces with walls and ceilings lined by perforated ribbed metal sheeting and fire rated insulation	c-d	none	Minor upgrades as part of exempted works – significant fabric, including openings to auditorium remains unaffected,

10.2.11 Service areas

Most service areas remain unaffected by the works proposed in this application.

These service areas were originally fitted out in accordance with Peter Hall's back-of-house regime of white or unpainted and unlined walls, floors and ceilings, with exposed carefully arranged colour coded services and conduits. Door finishes, numbering and hardware were consistent. It is very important that Hall's original design regime is retained and extended

into any new or altered spaces.

Element	Significance	Potential impact of proposal	Comment
Service areas	C-D	low	
Character of white painted off-form concrete walling with applied colour-coded services;	b	low	Most areas remain unaffected. In affected areas, it will be important to continue the Hall design regime of simple finishes.
Individual spaces so treated (including plant rooms, workshops, service corridors, vehicle access areas, storage and below-stage areas).	c-d	low	Most areas remain unaffected. In affected areas, it will be important to continue the Hall design regime of simple finishes.

10.3 Compliance with CMP policies

It is clear from the Statement of Significance in the CMP that the Sydney Opera House derives its significance primarily from its form (design structure and construction), function and setting. These three components are interdependent and as each of them is crucial to this significance then each must be maintained to the highest level. These are discussed below within the framework of relevant policies from the CMP 3rd edition.

Policy 1.1 Utzon, Hall and the approach to change – Utzon’s principles

All work on the Sydney Opera House should be carried out within the framework of Jørn Utzon’s design principles as endorsed in 2002.

Comment

The proposed works have been designed and will be documented and carried out within the framework of Utzon’s Design Principles.

Policy 1.2 Utzon, Hall and the approach to change – Utzon’s concepts

The following fabric and attributes are essential to Utzon’s concept for the Sydney Opera House and should be retained in any future development:

- the relationship between the three shell groups and the platform below;*
- the shell geometry and the ceramic tile cladding;*
- the canted alignments of the major shell groups;*
- the supporting structural systems throughout the building;*
- the visually free standing sculptural form of the building unobstructed by adjacent erections;*
- the open and uncluttered character of the forecourt and grand stair by which the raised podium is gained;*
- the visual relationship with the harbour setting from the podium – including the foyers surrounding the auditoria;*
- the retention of a ‘natural’ palette of materials for external fabric.*

Comment

Most of the fabric and attributes listed above remain unaffected by the proposed suite of projects in this application. Those that will be affected are:

- the supporting structural systems throughout the building;
- the visual relationship with the harbour setting from the podium – including the foyers surrounding the auditoria.

The JST accessibility projects to introduce access tunnels in the western side foyer and a new lift in the northern foyer, will require modification and partial removal of significant structural elements, particularly the cranked concrete beams. The proposals have been designed and located to limit negative impacts, but these will still be high. The works are in accordance with projects identified in the Accessibility Masterplan and these were based on an exploration of all available options, considered in relation to their relative impacts on significant fabric and values. The negative impacts are therefore considered acceptable in the light of the substantial improvement in accessibility and patron comfort.

The visual relationship between the foyers and the harbour setting will be marginally affected by the introduction of Lift 31 in the northern foyer. This lift will comprise a glass lift car within a fully glazed lift shaft above Level 3 to minimise this impact. This impact is considered acceptable.

Policy 1.3 Utzon, Hall and the approach to change – treatment of hybrid ‘outside’ spaces

Hybrid spaces, such as the foyers surrounding the major auditoria and the reception hall, reflecting the work of both Utzon and Hall, may be retained, or reworked in accordance with Utzon’s concepts and principles, provided the qualifications set out in Policy 56.1 are accepted.

Comment

There are a number of hybrid ‘outside’ spaces affected by the proposed suite of projects in this application. They are:

- JST southern foyer
- JST west side foyer
- JST northern foyer
- Box Office Foyer – hybrid Utzon / Hall space that uses ‘outside’ palette of materials

Proposed changes in the foyers surrounding the JST have been developed in accordance with the Utzon Design Principles, but also retain and re-work Hall’s elements.

The proposed changes in the Box Office Foyer remove almost all of Peter Hall’s work and develop new elements more closely aligned with Utzon’s concepts and principles.

With reference to Policy 56.1, all projects have been developed with input and advice from the Opera House’s heritage architect and review by the Eminent Architects Panel and Conservation Council. It is proposed that this continue through design development to construction and completion.

The proposed projects in this application comply with this policy.

.... he [Peter Hall] strove for a ‘commonality of character’ that enabled ‘all the spaces within the Opera House to be recognisably part of the same building’. ‘With the decision to use white birch veneered plywood for the Concert Hall ceiling and chair shells it seemed logical,’ he said, ‘for both practical and aesthetic reasons, to extend its use’ to those areas where a ‘higher standard of finish’ was required – even to the fitout of toilets. These were to be the spaces heavily used by the ‘public, artists and administration’ (ibid., 187) but did not include the ‘outside’ spaces such as the foyers. There the predominant character had already been established by Utzon’s concrete structure. (CMP pp 45-46)

The need for commonality and a limited palette of materials extended to the full range of details, but it was the white birch veneer in its various forms that made a major contribution to the unity of the performers’ and staff spaces within the podium. Hall therefore appealed to future generations to ensure that change was not considered in isolation but that the parts should continue to be related to the whole and ‘produce the feeling, despite its size and diversity of its functions, that it is one building’. He finished his appeal with the pithy advice: ‘Isolated detail changes are enough to undermine that quality’ (Hall. 1990, 199–200). (CMP p46)

Policy 1.4 Utzon, Hall and the approach to change – Hall's interiors

In any adaptation for modest functional improvement, interiors designed by Hall should retain or recover the character of his original design regimes with their co-ordinated detailing.

Comment

The intent of the works is to respect both Utzon and Hall. This should be regularly checked throughout the detailed documentation and execution of the works.

In back-of-house performers' and service areas fitted out by Hall, it is appropriate that Hall's design regime is retained and continued in accordance with Policy 1.4, noting also that Hall's minimalist approach to these spaces followed Utzon's intent for them.

Policy 1.5 Utzon, Hall and the approach to change – Major works

Major works within the auditoria and podium are acceptable where technical advance, expert advice, design quality, adequate resources and meticulous construction can be combined to create performance and service facilities that will improve function and reinforce or enhance the significance of the Sydney Opera House, provided that:

- *the work is planned in the context of an overall plan for the place;*
- *the scheme is developed in accordance with Policy 56.1 on the management of change.*

Comment

This proposed suite of projects will enhance the functionality and significance of the JST as a performing arts venue and fits within the context of an overall plan to upgrade accessibility across the site in accordance with the Sydney Opera House Accessibility Master Plan. The projects have been developed and will be hopefully executed in accordance with advice as described in policy 56.1.

More substantive works are proposed in the Box Office Foyer, and these have been developed within the context of an overall plan to upgrade the public areas in accordance with the Utzon Design Principles and the Accessibility Master Plan.

Policy 6.1 External form

The Opera House should retain unchanged its external form of roof shells, glass wall concept, podium and podium steps, forecourt and broadwalk.

Some aspects, however, were never satisfactorily resolved: the awkward conjunction of the glass walls and the [external] steps at the northern corners of the podium; and the heavy heat load transmitted to the spaces behind the glass — particularly in the northern foyers. (CMP p 53)

Comment

The external form of the Opera House remains unaffected by the proposed projects except for three components. These are:

- The introduction of a new lift in the glass wall of the JST southern foyer (Lift 36) and consequent relocation of a pair of bronze framed glass doors to the side glass wall of the same foyer. These changes occur below the main bronze transom and fit within the existing design language of the glass walls.
- Modifications to the western re-entrant side of the JST northern foyer glass wall to enclose and protect the new Lift 31. These modifications will remain largely out of view within the space between the projecting northern ends of the podium.
- Introduction of 2 new horizontal openings in the eastern side of the podium to admit daylight to the proposed Eastern Accommodation.

The impact of the changes to the form of the glass walls are relatively minor and considered acceptable.

The impact of the changes to the eastern side of the podium are consistent with existing openings in the podium and do not adversely affect its form or sense of solidity. These changes are considered acceptable.

Policy 9.1 Openings in podium walls

No treatment of the podium should diminish the impressive effect of its solid side walls with their minimal horizontal fenestration nor disrupt the contrast with the ceramic clad shells and glass walls above.

Comment

The impact of the new horizontal openings in the eastern side of the podium are consistent with the design and proportion of existing openings and do not adversely affect its sense of solidity. These changes are considered acceptable.

While the exterior podium stairs were intended to remain the primary approach, the spaces through which the lower approach was effected were designed to provide a sequence of contrasting experiences in which powerful structural forms and levels of illumination played an important part. The vehicle concourse, the four stairways and the box office foyer were the first three elements in Utzon's lower sequence. The concourse was a broad, open-ended space defined to the south by the mysterious angled descent of the folded beams into the ground. From the concourse, those arriving climbed one of the four stairways which ascended in an linear incline to the box office foyer.

.... This low space with its modest level of natural and artificial light provided an intended contrast to the next experience—the extraordinary spaces of the foyers, contained only by the soaring ribs of the shells and the brush box carcass of the auditoria, and linked to the surrounding land and sea scape through non-reflective glass walls. The transition was similar to that of passing from the low dark narthex of a mediaeval cathedral to the soaring, clerestory lit, rib-vaulted space of the nave. (CMP p61)

Both approaches (via the exterior podium stairs and via the vehicle concourse and internal stairs) are important visitor experiences. Entry to the building via the former is through the range of glass doors to the box office foyer. Like the auditoria foyers with their glass walls the box office foyer was treated as an outside space and given a natural palette of materials and colours.

Policy 17.1 Designed sequence of interior public spaces

Both original arrival sequences with their different and changing experiences should be retained:

- *forecourt, grand staircase, podium, box office foyer, and auditoria foyers;*
- *vehicle concourse, stairways, box office foyers and auditoria foyers.*

This policy includes the retention of original spaces, the presentation of unobstructed and revealingly lit structural systems and the consistent use of a range of 'natural' materials, textures and colours.

Comment

The proposed suite of projects include changes to a number of spaces in Utzon's designed sequence of interior public spaces. These spaces include:

- Utzon Room stair from the Vehicle Concourse to the Box Office foyer
- Box Office foyer
- foyers surrounding the JST auditorium.

The proposed changes range in impacts from minor to substantial, but they retain the sequence, character and experiential qualities of the spaces as Utzon had intended.

An important aspect of these changes is that they will enable people with limited mobility access spaces they have previously been unable to fully experience. This is considered a very positive impact and is a major objective of the proposed works.

Policy 18.1 Access for people with disabilities and elderly – escalators and lifts

Any proposal to improve access between levels should not:

- *vitiate Utzon's concept for the sequence of public spaces (see pages 61 to 62 and policy 17.1);*
- *interrupt or obscure any of the original structural systems (for example, folded and radial cranked beams);*
- *result in the sub division or cramping of spaces with an assessed significance of 'considerable'(B) or 'exceptional' (A).*

Comment

The proposed works to improve accessibility to the Box Office and the JST will not vitiate Utzon's approach and arrival sequence. However there are a number of negative impacts that arise from these projects. These can be summarised as follows:

- Lift 36 will interrupt the broad sweep of stairs and radial cranked beams in the JST northern foyer;
- The new tunnel in the JST western side foyer on Level 3 will sub-divide and cramp the sweep of stairs in this foyer but is required in order to provide level access to wheelchair position further back in the stalls and more direct access to WCs in the northern foyer.

The design of each project carefully considered potential impacts when they were first explored in the process of developing the SOH Accessibility Master Plan. As now proposed and documented, they offer the least negative impact, but it is still essential that all details and configurations be refined and tested with full size mock-ups to ensure and confirm the best outcome as part of the detail development and documentation process before works proceed.

It is important to note that button tactile indicators are considered potentially intrusive and not supported for use on the Opera House site. Any proposal for tactile indicators must be tested and approved by the SOHT heritage architect, Conservation Council and Eminent Architects Panel.

An important aspect of the changes proposed in these projects is that they will enable people with limited mobility to access spaces they have previously been unable to fully experience. This is considered a very positive impact and is a major objective of the proposed works.

Policy 22.1 Interior lighting – hybrid 'outside' spaces

Lighting in the hybrid 'outside' spaces within the building should:

- *retain the sequence of contrasting effects as an arriving patron passes through the building;*
- *reveal the architectural character and atmosphere of the spaces: for example, the structure of the pedestals and spreading ribs, and the considerable height and cathedral atmosphere of the rib vaults; also to emphasise the character of the beams in both south and north ends of the building;*
- *maintain reflection-free views of the harbour from the foyers;*
- *render the colour of natural materials as accurately as possible;*
- *achieve reasonable levels of visual acuity for specific functions without compromising the above requirements and without the inappropriate location of equipment and conduits.*

Policy 22.2 Interior lighting – adapted spaces

Where relatively modest adaptations of spaces are involved the original lighting design regime should be retained and, where necessary, unobtrusively adjusted or supplemented.

Policy 22.3 Interior lighting – redesigned spaces

In any major redesign of spaces in which architectural character is important, the emphasis should be

on concealed or unobtrusive light sources that reveal or reinforce that character, in addition to illumination for the safe and effective function of the space.

Policy 22.5 Interior lighting – safety

Any safety issues should be addressed without disrupting the requirements in the policies above.

Comment

Lighting is an essential part of each of these proposed projects. Proposed measures include:

- extension of the present Box Office lighting system or near equivalent into the stairways connecting the Vehicle Concourse with the Box Office foyer – including the Utzon Room stair where the escalators are proposed to improve safety and enhance the character of the space, and also into the extended foyer areas;
- retention of deliberately different lighting levels to emphasise the character of each space in Utzon’s arrival sequence;
- refinement of the indirect lighting system in handrails as part of a future site wide upgrade of handrail systems;
- continuation of indirect lighting regimes and systems into new or refurbished spaces, consistent with similar spaces.

Policy 23.1 Character and treatment of internal spaces – “Wobbly Land” – performers’ and staff areas

Spaces fitted out with wobbly regimes should retain the characteristics and quality of that regime.

Policy 23.2 Character and treatment of internal spaces – “Wobbly Land” – performers’ and staff areas – adapted spaces

Work necessary to adapt existing wobbly spaces to new or upgraded functions should be designed:

- *to continue the original characteristics and quality of the space or to complement those characteristics;*
- *to have minimum impact on the original fabric.*

Policy 24.1 Character and treatment of internal spaces – Service areas

In accordance with policy 1.4 (Hall’s interiors) the general character of the service areas should be retained in any future adaptations.

Policy 24.2 Character and treatment of internal spaces – Service areas

Care should be taken during alteration and upgrading of services to remove those with no likely future use and to maintain a tradition of neat and precise installation of colour coded services.

Comment

Documents describing the proposed projects in this application confirm the intent to retain and respect Peter Hall’s design regime into refurbished performers’, staff and service spaces within the podium. This will need to be monitored throughout the design development and documentation phases to ensure this objective is not lost.

Policy 25.1 Character and treatment of internal spaces – New areas

In accord with policy 1.6 (additional on-site facilities), entirely new spaces may be created by excavation. Where the new spaces are to have a visual or significant sequential relationship with existing Hall designed spaces they should be fitted out to the corresponding design regime. Where no such relationship exists, the new spaces may be fitted out in a contemporary idiom appropriate to the proposed use.

Comment

Documents describing the proposed projects in this application confirm the intent to retain

and respect Peter Hall's design regime and extend it in an appropriately modified form into new and adapted spaces within the podium.

Policy 26.1 Character and treatment of internal spaces – Internal adaptation and alteration

In keeping with policy 1.4, changes and extensions of use, technical improvements and upgrading of access and facilities should be permitted where they can be carried out without loss of quality and character in the spaces involved.

Comment

DA documentation suggests the quality and character of spaces affected by the proposed suite of projects will be retained, however it is important that refinement and consistency of details be continued during the design development and documentation phases.

Policy 28.1 Foyers surrounding the major auditoria

Whatever action is taken, the foyers should be treated as 'outside' spaces and 'natural' materials, textures and colours used.

Policy 28.2 Foyers surrounding the major auditoria – unimpaired and uncluttered

Surrounding views from the foyers should remain unimpaired by intrusions or reflections and the foyers should be maintained in an uncluttered state.

Comment

The foyers surrounding the JST will retain and continue to use the 'natural' palette of materials and colours in the proposed changes. The new lifts, 31 and 36, are proposed to be fully glazed at this level to assist transparency and minimise visual impacts and intrusions in the affected spaces.

Box Office foyer

Policy 30.1 Box Office foyer – characteristics

The Box Office Foyer should retain the characteristics of an 'outside' space, that is, it should be predominantly fitted out with a 'natural' range of materials.

Policy 30.2 Box Office foyer – spatial quality

The original spatial quality of the Box Office Foyer should be retained or recovered in any improvement of facilities or access.

Improvements referred to in policy 30.2 may include links between Box Office Foyer, Broadwalk and basement levels offering easier access for disabled and elderly. The policy also involves the removal of the shop, store and moveable storage bay from the east end of the foyer, but see 'Treatment of intrusive items' on page 85.

Policy 30.3 Box Office foyer – folded beams

No facility should obscure the folded beams overhead.

Comment

The proposed changes and new fitout in the Box Office foyer generally align with Utzon's design principles for this 'outside' space and palette of 'natural' materials. The only exception is the introduction of carpet and felt in the lounge areas – materials that are inconsistent with Utzon's palette for this space, however these softer materials are for acoustic purposes and are restricted to designated lounge areas. The main circulation areas retain the original precast granite paving slabs and 'outside' materials.

The spatial qualities of the Box Office foyer are not diminished by the extended and reconfigured northern section of the foyer. This extended area and the reorganisation of functions within the foyer strengthen its original spatial qualities.

None of the folded beams are obscured and with the clearing out of presently intrusive fitout and infrastructure, these beams should appear more expansive and uncluttered.

Policy 38.1 Care of the fabric – Removal or alteration of fabric

Any proposal to remove or alter original and/or significant fabric should:

- *have regard to the level of significance of the fabric and to the impact on the character and quality of the place affected;*
- *be checked to ensure there is no feasible alternative;*
- *only be considered in the context of an overall plan.*

Comment

All of the projects proposed in this DA involve the removal or alteration of significant fabric. In determining the nature and configuration of each part of each project, considerable regard was made for the significance of the fabric affected and the potential impacts on the space concerned.

Alternative options were explored and tested, often to check that the preferred option in the SOH Accessibility Master Plan was in fact the most appropriate.

These projects are part of a broader program of renewal, a major objective of which is to upgrade the accessibility of facilities and venues across the Opera House site.

Policy 41.1 Treatment of unpainted precast and off-form concrete

Interior and exterior surfaces of unpainted concrete ribs, pedestals and beams should remain unpainted and their details unobscured.

Comment

All projects in this suite of projects retain unpainted concrete as unpainted and exposed.

Policy 49.1 Managing the process of change – Use, approach and review

The Sydney Opera House should continue its primary use as a performing arts centre and its importance as a tourist attraction should be recognised. The building and its setting should not be altered to accommodate uses that will vitiate its significance and character. The approach should be sufficiently flexible to permit the delivery of a high level of performance and provision of services.

Policy 49.3 Managing the process of change – Use, approach and review

Proposed changes of use to any part of the building should only be considered in the context of a co-ordinated plan for the whole building and priorities established to determine which functions must be kept on site and which may be located elsewhere.

Comment

All projects in this suite of projects support and strengthen the primary use of the site as a performing arts centre. They improve accessibility to its public spaces, the JST itself, and to performers' spaces beneath the JST within the podium.

Policy 50.1 Managing the process of change – compatibility

Uses are unacceptable if they require alterations, additions and facilities that:

- *vitate the original concept of the designers of those elements of the place that are assessed as being of exceptional significance;*
- *degrade the character and quality of fabric, spaces and relationships;*
- *are likely to cause excessive wear and tear, or disfigurement, to significant fabric.*

Comment

The changes proposed in this suite of projects have some negative impacts, however they do not endanger or diminish the original concepts of either Utzon or Hall for the affected spaces, or the Opera House generally. Nor do they degrade the character and quality of fabric, spaces and relationships for the affected areas.

Where negative impacts do occur, the disfigurement of significant fabric is mitigated by careful consideration of details, junctions and linings. These require further refinement and if necessary, prototyping, in the next stages of design development.

Policy 51.1 Managing the process of change – Relating levels of significance to proposals

The more significant a concept, fabric, relationship, space of vista, the more should care be exercised in preparing proposals that may affect the place – the objective being to ensure that the work not reduce, and may reinforce, the identified significance.

Comment

All of the projects proposed in this DA involve the removal or alteration of significant fabric. In determining the nature and configuration of each part of each project, considerable regard was made for the significance of the fabric affected, the potential impacts on the space concerned, and the role of the particular project in supporting the broader significance of the place.

Policy 52.1 Managing the process of change – Use of the Burra Charter

The future conservation and development of the place should be carried out in accordance with the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) as revised in 1999.

Comment

All decisions thus far relating to the suite of projects in this application have been in accordance with Burra Charter principles and processes. This should continue to the completion of the project.

Policy 56.1 Managing the process of change – Sequence and advice in developing proposals

Continuity of relevant and experienced heritage conservation advice should be provided as part of the process by which changes to the Sydney Opera House and its setting are developed and executed. The timing of this advice is important. For major projects it should be drawn upon:

- *initially, at the concept stage;*
- *during the development and refinement, or alteration, of the proposal;*
- *for a formal statement of heritage impact, or its equivalent, in response to the completed development application;*
- *to keep a watchful eye on work actually underway.*

Comment

Heritage conservation advice has been sought throughout the design stages for this project and this HIS assesses the completed development application. It is important that this specialist advice continue through to completion of the project to ensure the broader as well as detailed conservation objectives are achieved.

Policy 59.1 Managing the process of change – External processes

Changes that may have a 'significant effect' on the heritage significance of the Sydney Opera House and its site should be referred to the relevant consent authority.

Comment

The suite of projects proposed in this application involve some major changes that will have a high impact on some fabric and spaces. These impacts have been assessed in this Heritage Impact Statement and this will accompany an application for approval from the relevant consent authorities.

The CMP 3rd edition does not provide specific policies for the Opera Theatre (JST), however on page 76 Kerr notes:

One result [of Halls decision to stain the walls and ceilings matt black] has been that the architectural character of the auditorium is substantially neutralised and this, together with existing functional and acoustic problems, means that the theatre's level of significance is relatively modest. It follows that, while policies 1.4 (Hall's interiors) and 1.5 (major internal works) are both acceptable treatments, it is the major reworking in terms of Utzon's principles that can achieve the most satisfying results.

The policy options in order of preference are therefore:

- redesign of the Opera Theatre in accordance with policy 1.5 (major internal works) having regard to Utzon's design principles;
- adaptation of the Opera Theatre in accordance with policy 1.4 (Hall's interiors) in order to improve functional and acoustic performance while retaining the character of the Hall approach.

Comment

With regard to the Opera Theatre (JST), the changes proposed in this suite of projects are relatively modest and do not constitute a major change. Thus all proposed works in the JST retain and respect the design and fitout by Peter Hall.

10.4 Conclusion re CMP compliance

The suite of projects proposed in this application will affect a number of very significant parts of the Sydney Opera House. The impacts are described in detail above but are summarised here.

Spaces and elements identified as having exceptional or considerable significance that will be affected by these works are:

- External eastern wall of the podium – insertion of 2 additional hooded horizontal window openings – high but acceptable impact that should be largely unnoticed.
- Utzon Room Stair from the Vehicle Concourse to the Box Office – replacement of existing stair with a pair of escalators – high but acceptable impact on fabric with positive impact on accessibility and functionality.

- Box Office Foyer – removal of almost all existing fitout by Peter Hall and replacement with new fitout and furnishings, extension and reconfiguration of space to north to improve amenity and functionality and provide front-of-house access to lifts to southern foyers – high but positive impact.
- JST Southern Foyer – new fully glazed Lift 36 replacing 1 of the existing pair of podium doors in the southern glass wall and the latter’s relocation to the side glass wall of this foyer – moderate and acceptable impact.
- JST western side foyer – insertion of tunnel at Level 2 within the timber wall zone of the auditorium – high impact, but largely concealed and acceptable.
- JST western side foyer – insertion of tunnel at Level 3 cutting through and reducing width of stairs – very high impact, but considered acceptable in order to provide improved accessibility.
- JST Northern Foyer – new Lift 31 accessing all northern foyer levels and cutting through the granite stairs at the west end, removing sections of 3 of the radial cranked beams, and modifying a section of the glass wall – very high impacts, but acceptable in order to provide improved accessibility.
- JST auditorium seating – alteration of total of 6 rows of seating to allow efficient removal and installation of wheelchair platforms, railings and companion seating – moderate and acceptable impact on seating and positive impact on accessibility.
- JST auditorium space – construction of new follow spot room and alterations for wheelchair positions – moderate but acceptable impacts on character and quality of space.
- JST northern foyer lavatory facilities – alterations to air locks and adjacent spaces to install accessible WCs – moderate but acceptable impact.
- JST back-of-house lavatories, locker rooms and dressing rooms – alterations in limited areas to provide accessible dressing room and performer facilities – moderate but acceptable impact.

Spaces and elements identified as having some or little significance that will be affected by these works are:

- JST Auditorium – provision of wheelchair and companion seating positions in 2 locations in the stalls, construction of new follow spot room, replacement of fire curtain – moderate but positive impacts that will enhance the accessibility and functionality of the JST.
- Service areas beneath the JST – adaptation of existing service spaces for new SOH office accommodation associated with new openings in podium – moderate impact.

11.0 DISCUSSION OF COMPLIANCE WITH THE UTZON DESIGN PRINCIPLES

The *Utzon Design Principles* (UDP) provide important guidance on the intended role of particular spaces and elements and on how they should be treated in the future. Relevant quotes are provided below.

Need to adjust to changing standards

“So what was good back in the 60’s was okay then, but as people develop and as music develops, as our perception of music and place develops, our demands become higher and this development will probably in the future change a lot of features of the Opera House simply because you need to adjust to instruments, as such.” (UDP page 52)

Comment

Jørn Utzon clearly did not see the technical aspects of this building as frozen in time. He foresaw that adjustments would be needed to meet audience expectations and changing standards. The suite of projects in this application, particularly those that are part of the

technical upgrade of performance spaces, respond to this same principle.

Heavy and light

"The difference in character of the two components forming the building, the massive and imposing base, and the light and graceful shells on top of it..." (UDP page 70)

Solidity of base is important

"If you open the sides of the base to create day-light... then suddenly the base becomes an office building, and that will reduce drastically the dramatic expression of the Opera House." (UDP page 50)

Comment

The importance of the visual solidity of the podium is clearly articulated in the first quote and a warning about introducing more openings in the second quote. The scale, proportion, configuration and detail of the proposed new openings in the east wall of the podium have been guided by these principles.

Beautiful experience oriented in the harbour

"...People have a beautiful experience entering and walking up the stairs and entering the auditoria, while they are all the time oriented in the beautiful harbour and have the views of the spectacular Sydney Harbour setting." (UDP page 59)

Being in another world

"This feeling of moving upwards was a determining factor in the shaping of the large platform."

"The patrons will receive on their way to the theatre halls an impression of restful and dignified surroundings with a generous spacious layout." (UDP page 59)

Feeling detached from the city

"During intermission you remain around the auditorium and can retain the feeling of being in another world."

"After the performance the bars and lounges will present for the patrons a second opportunity to enjoy these views and will underline their feeling of being detached from the city in a world of its own." (UDP page 60)

Spans expressed by ribs and folds

"This resulted in a building where all spans are clearly expressed by ribs and folds." (UDP page 78)

Comment

These quotes describe Utzon's intended character for the foyer spaces leading to and surrounding the major auditoria.

This character in the Box Office foyer, JST southern, side and northern foyers is retained and respected in the projects proposed in these spaces.

The proposed tunnel on Level 3 of the JST side foyer intrudes on the width of the stair, however the dignity of surroundings and sense of ascent is retained. It is important to note that this tunnel is very close to the location of a tunnel originally proposed by Utzon and built, but closed over due to the program changes after his departure in 1966.

The Box Office foyer, with the alterations proposed, adheres to and celebrates these Utzon principles and provides a much more generous and spacious layout than the existing arrangement.

Patrons / performers meeting

"At the cloak room level there is access for the performers."

"Unlike the normal theatre, where one literally goes to the back door for social intercourse, the patrons and performers can mingle together in the cloakroom area."

"The idea was to see a spectacular building as you arrive and as you enter the foyers you see additional colours. You also get a more intimate feeling." (UDP page 60)

Comment

These quotes refer to the intended function and character of the Box Office foyer which is adjacent to and at the same level as the Green Room. The proposed project to reconfigure and re-furnish this foyer will strengthen this character. The lounge areas will provide opportunity to sit, rest and enjoy a coffee or drink with others, exactly as Utzon intended, without interfering or obstructing the movement of patrons within and through the space. It will be important that Opera House management do not allow it to become fragmented and cluttered in the future by inappropriate uses and fitout.

Sample elements of the proposed foyer fitout will be mocked-up for use by the public in the coming months. The intention is to test the various components and if necessary, refine or adjust them in the final fitout.

Cultural symbol

"The conception and the design of the Sydney Opera House is based on... the desire to create a building which will form a home for those activities essential to the cultural life of a big city." (UDP page 62)

Inspiration to artists

"When completed, the Sydney Opera House will serve as a home for the cultural activities of the city and will inspire artists and technicians to present to the public the highest quality performance for many years to come." (UDP page 62)

Comment

Presentation of the performing arts is at the very heart of this building, as is the pursuit of excellence. The proposed projects in this application, particularly the accessibility projects, will allow the Opera House to pursue both these objectives and be available to a wider section of the community than it has before.

Disabled access

"For patrons unable to walk, there will be provided special elevators to take them direct to the auditorium level in the vicinity of the seating."

"A total of ten lifts will service the Opera House, each lift being carefully located for a specific purpose. Lift No.1 with landings at the 12', 30' and 42' levels has a primary function of transporting disabled persons from ground floor level to the auditorium level. (Major Hall)."

"Lift No.2 in the stage area (Minor Hall) has the primary function of carrying a total of 16 disabled persons from ground level to auditorium level with one intermediate stop." (UDP) page 69)

Comment

These Utzon quotes from 1959, describe the intended access to the auditoria for patrons with mobility issues. The change in program after his departure and the decision to close the Central Passage to the public, meant this would no longer be a front-of-house approach. The projects proposed in this application are intended to address this problem for the Box Office foyer and the JST. These projects will result in some negative impacts to significant spaces, however the location and configuration of these projects have been carefully designed to minimise these impacts. Further detail resolution should minimise them even further.

The JST plays a key role in the suite of venues housed at the Opera House. It is the venue for opera – the namesake of the building itself. If the ability of the building to house and present opera and other performance art is not extended to those with impaired mobility, the place will be diminished and Sydney Opera House will potentially lose its international status as a performing arts venue.

By undertaking these projects, the Opera House will demonstrate excellence, responsibility and generosity to those patrons and performers that have previously been excluded because of their impaired mobility. This responsibility and generosity was originally intended and proposed by Utzon himself.

Concrete and ply

"The walls will show the concrete as it was constructed, contrasting with the moulded plywood panels which form the components of the furniture and fixings."

"The cubicles themselves for coats and toilets are made of moulded plywood panels in contrast to the impression of severity left by the structure." (UDP page 71)

Comment

These quotes refer primarily to the character of back-of-house spaces within the podium and are from Utzon's 1959 description of his intended fitout. It is now clear that Peter Hall followed Utzon's ideas and principles in his fitout of these spaces.

The DA documentation for projects in these areas demonstrates the intention to retain and respect these ideas in altered and new work. It is important that detailed resolution and documentation of these projects are carefully coordinated and resolved to a consistent language and high quality, and comply with these Utzon Design Principles and the CMP.

12.0 COMPLIANCE WITH SYDNEY LOCAL ENVIRONMENT PLAN 2012 (SYDNEY LEP 2012)

The Sydney Opera House is listed as a Heritage Item on Schedule 5 of the Sydney LEP 2012 (Item 11712). The listing includes "forecourt, seawall, platform and interiors."

Before granting consent, an assessment of the impact of any proposed development is required via a 'heritage management document'. A conservation management plan is also required. (Clauses 5.10 (5) and (6) of the LEP 2012)

Section 10 of this Heritage Impact Statement assesses the proposed suite of projects in this application against the CMP 3rd edition. This accords with the heritage conservation requirements in the LEP 2012.

13.0 CONCLUSION

Many components of this suite of projects will greatly improve access to the JST side of the Opera House to a wider section of society – particularly those with reduced mobility, many of whom will never have experienced some of these spaces before. This is considered a very positive impact and is a major objective of the proposed works.

The impacts of this suite of projects on the Opera House are described in detail above in this report and are summarised here with reference to the CMP 3rd edition.

Spaces and elements identified as having exceptional or considerable significance that will be affected by these works are:

- External eastern wall of the podium – insertion of 2 additional hooded horizontal window openings – high but acceptable impact that should be largely unnoticed.
- Utzon Room Stair from the Vehicle Concourse to the Box Office – replacement of existing stair with a pair of escalators – high but acceptable impact on fabric with positive impact on accessibility and functionality.
- Box Office Foyer – removal of almost all existing fitout by Peter Hall and replacement with new fitout and furnishings, extension and reconfiguration of space to north to improve amenity and functionality and provide front-of-house access to lifts to southern foyers – high but positive impact.
- JST Southern Foyer – new fully glazed Lift 36 replacing 1 of the existing pair of podium doors in the southern glass wall and the latter's relocation to the side glass wall of this foyer – moderate and acceptable impact.
- JST western side foyer – insertion of tunnel at Level 2 within the timber wall zone of the auditorium – high impact, but largely concealed and acceptable.
- JST western side foyer – insertion of tunnel at Level 3 cutting through and reducing width of stairs – very high impact, but considered acceptable in order to provide improved accessibility.
- JST Northern Foyer – new Lift 31 accessing all northern foyer levels and cutting through the granite stairs at the west end, removing sections of 3 of the radial cranked beams, and modifying a section of the glass wall – very high impacts, but acceptable in order to provide improved accessibility.
- JST auditorium seating – alteration of total of 6 rows of seating to allow efficient removal and installation of wheelchair platforms, railings and companion seating – moderate and acceptable impact on seating and positive impact on accessibility.
- JST auditorium space – construction of new follow spot room and alterations for wheelchair positions – moderate but acceptable impacts on character and quality of space.
- JST northern foyer lavatory facilities – alterations to air locks and adjacent spaces to install accessible WCs – moderate but acceptable impact.
- JST back-of-house lavatories, locker rooms and dressing rooms – alterations in limited areas to provide accessible dressing room and performer facilities – moderate but acceptable impact.

Spaces and elements identified as having some or little significance that will be affected by these works are:

- JST Auditorium – provision of wheelchair and companion seating positions in 2 locations in the stalls, construction of new follow spot room, replacement of fire curtain – moderate but positive impacts that will enhance the accessibility and functionality of the JST.
- Service areas beneath the JST – adaptation of existing service spaces for new SOH office accommodation associated with new openings in podium – moderate impact.

It will be very important that all details throughout all these projects are carefully coordinated and resolved to a consistent language and very high quality, and comply with the Utzon Design Principles and the CMP. These are being reviewed during the detail design development stage by means of regular 'design consistency' workshops, attended by the SOH heritage architect and members of the Eminent Architects Panel and Conservation Council. All details should be finalised with their approval.

These include:

- the expression and treatment of cuts through the stepped podium surface, stairs and beams in the side and northern foyers;
- detail expression of materials and finishes;

- detail resolution of lifts;
- resolution of handrail, balustrade and guardrail details;
- consistent application of these details across the site.

It should be noted that as documented, the suite of proposed projects are generally consistent with the Utzon Design Principles, and the intent of the policies in the CMP.

The design of each project carefully considered potential impacts when they were first explored in the process of compiling the SOH Accessibility Master Plan. As now proposed and documented they offer the least negative impact, but it is still essential that all details and configurations be refined and tested with full size mock-ups to ensure and confirm the best outcome as part of the detail development and documentation process before works proceed.

In conclusion it is our assessment that the negative impacts on fabric and spaces at the Opera House identified in this assessment should not threaten or diminish the outstanding universal values that underpin its World Heritage Listing.

These impacts are high on the fabric of the JST foyer spaces, but should not substantially affect the Opera House's national or state heritage values. However, because these impacts affect spaces and fabric of exceptional / considerable significance, it is our recommendation that a referral to the Commonwealth Government under the EPBC Act should be made.

Combined with the Theatre Machinery Project (subject of a separate application) these projects will enhance the patron experience and performance and operational capability of the Sydney Opera House to continue to host and celebrate world standard performance art. In this respect this proposal will help sustain the iconic international standing of this Opera House.



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